### Title 15 - Mississippi Department of Health

## Part 12 - Bureau of Emergency Medical Services

#### Subpart 32 - Trauma System

Rule 1.2.8. Term of Trauma Center Designations: The department shall designate Trauma Centers for a period not to exceed three (3) years. Designations shall remain active for three years provided no substantive changes or variances have occurred. The Department (and Trauma Care Regions for Level IV Trauma Centers only) may perform periodic trauma center audit/reviews at each designated Trauma Center. The State Health Officer (SHO) may extend Trauma Center designations for one (1) year.

Source: Miss. Code Ann. § 41-59-5

- Rule 1.3.5. Trauma Care Trust Fund Distribution Calculation: Amounts to be disbursed from the Trauma Care Trust Fund (TCTF) shall be calculated as follows:
  - 1. On or about April 1 and October 1 of each year, or at such other times as the State Health Officer may direct, the Trauma System Administrator (TSA) shall obtain a Treasury report showing the fund balance in the TCTF.
  - 2. To obtain the amount to be distributed, the following amounts will be subtracted from the fund balance:
    - a. One half of an amount to be determined by the Department for administrative expenses of the Department Division of Trauma as of the date of the calculation;
    - b. One half of an amount not to exceed Ten Thousand Dollars (\$10,000) for each Level IV Trauma Center which has completed at least one year of satisfactory participation in the Mississippi Trauma Care System as of the date of the calculation (annual stipend);
    - c. One half of an amount not to exceed Ten Thousand Dollars (\$10,000) for each Level IV Trauma Center which has completed at least one year of satisfactory participation in the Mississippi Trauma Care System as of the date of the calculation (educational grant); and
    - d. One half of an amount to be determined by the Department, and approved by the MTAC, for administrative expenses for each Trauma Care Region, as of the date of the calculation.

3. The amount remaining after the above administrative payments have been calculated, reserved and/or expended, shall be distributed according to the TCTF formula (refer to Appendix C for a graphic representation).

Source: Miss. Code Ann. § 41-59-5

## Rule 1.3.7. Trauma Card Trust Fund Hospital Fixed Distribution

- 1. Eighty-five percent (85%) of the amount remaining after administrative expenses shall be distributed to the Trauma Regions for further distribution to participating Trauma Centers.
- 2. Thirty percent (30%) of the amount reserved for distribution to hospitals shall be distributed according to a "Fixed Distribution," based on the designated level of each eligible Trauma center.
- 3. For purposes of determining amounts to be distributed to Trauma Centers pursuant to this rule, the following definitions shall apply:
  - a. Number of Facilities the number of licensed acute care facilities designated as a Level I, Level II or Level III Trauma Centers
  - b. Relative Weights Level I shall equal 100%; Level II shall equal 87.5%; Level III shall equal 62.5%
  - c. Calculated Weight Equals the number of facilities designated at a particular level of trauma center multiplied by the relative weight.
  - d. Total Weight equals the sum of calculated weights
  - e. Disbursement by Hospital Type equals Total Hospital Fixed Fund / Total Weight X Relative Weight
  - f. Total Disbursement by Hospital Type equals the sum of Disbursement by Hospital Type
- 4. To calculate the Hospital Fixed Distribution, the following formula is used (refer to Appendix C for a graphic representation):
  - a. Multiply the number of facilities in each category (Level I, Level II and Level III) by the relative weights of each category. The product of this operation shall be the calculated weight of each type facility.
  - b. Sum the relative weights to obtain the "calculated weight."

- c. Divide the total Hospital Fixed Distribution amount by the product of the sum of the relative weights ("calculated weight") and the relative weight assigned to that category.
- d. The result is the amount to be distributed to each facility of that particular type (Level I, Level II or Level III).

# Rule 2.1.7 Multidisciplinary Trauma Committee

- 1. The purpose of the committee is to provide oversight and leadership to the entire trauma program. The exact format will be hospital specific and may be accomplished by collaboration with another designated trauma center in the region. Each trauma center may choose to have one or more committees as needed to accomplish the task. One committee should be multi-disciplinary and focus on program oversight and leadership. The major focus will be on PI activities, policy development, communication among all team members, and establishment of standards of care, and education and outreach programs for injury prevention. The committee has administrative and systematic control and oversees implementation of all program related services, meets regularly, takes attendance, maintains minutes and works to correct overall program deficiencies to optimize patient care. Membership for the committee includes representatives from:
  - a. Emergency Medicine
  - b. General Surgery
  - c. Orthopedics
  - d. Neurosurgery
  - e. Anesthesia
  - f. Operating Room
  - g. Intensive Care
  - h. Respiratory Therapy
  - i. Radiology
  - j. Laboratory
  - k. Rehabilitation
  - 1. Pre-hospital Care Providers

- m. Administration
- n. Pediatrics
- o. Nursing
- p. Trauma Program Manager
- q. Trauma Medical Director (Chairman; must be present > 50%)
- 2. The clinical managers (or designees) of the departments involved with trauma care should play an active role with the committee.
- 3. The trauma center may wish to accomplish performance improvement activities in this committee or develop a separate peer review committee. This committee should handle peer review independent from department based review. The committee must meet regularly and maintain attendance and minutes. This committee must report findings to the overall hospital performance improvement program.

### Rule 2.3.1. Emergency Department

- 1. The facility must have an emergency department, division, service, or section staffed so trauma patients are assured immediate and appropriate initial care. The emergency physician and/or mid-level provider (Physician Assistant/Nurse Practitioner) must be in-house 24 hours/day and immediately available at all times. The emergency department medical director must meet the recommended requirements related to commitment, experience, continuing education, ongoing credentialing, and board certification in emergency medicine.
- 2. The director of the emergency department, along with the Trauma Medical Director, will establish trauma-specific credentials that should exceed those that are required for general hospital privileges. Examples of credentialing requirements would include skill proficiency, training requirements, conference attendance, education requirements, ATLS verification and specialty board certification.
- 3. The emergency medicine physician will be responsible for activating the trauma team based on predetermined response protocols. He will provide team leadership and care for the trauma patient until the arrival of the surgeon in the resuscitation area. The emergency department must have established standards and procedures to ensure immediate and appropriate care for the adult and pediatric trauma patient. The emergency department medical director, or his/her designee, must act as a liaison and participate with the Multidisciplinary Trauma Committee and the trauma PI process.

- 4. There shall be an adequate number of RN's staffing the trauma resuscitation area in-house 24 hours/day. Emergency nurses staffing the trauma resuscitation area must be a current provider of Trauma Nurse Core Curriculum (TNCC) and participate in the ongoing PI process of the trauma program. There must be a written plan ensuring nurses maintain ongoing trauma specific education. Nurses must obtain TNCC within 18 months of assignment to the ER.
- 5. The list of required equipment necessary for the ED can be found on-line at http://msdh.ms.gov/msdhsite/static/49.html.

### Rule 2.3.2. Surgical Suites/Anesthesia

- 1. The operating room (OR) must be staffed and available in-house 24 hours/day.
- 2. The OR nurses should participate in the care of the trauma patient and be competent in the surgical stabilization of the major trauma patient.
- 3. The surgical nurses are an integral member of the trauma team, and must participate in the ongoing PI process of the trauma program and be represented on the Multidisciplinary Trauma Committee.
- 4. The OR supervisor must be able to demonstrate a prioritization scheme to assure the availability of an operating room for the emergent trauma during a busy operative schedule. There must be an on-call system for additional personnel for multiple patient admissions.
- 5. The anesthesia department in a Level I Trauma Center should be ideally organized and run by an anesthesiologist who is highly experienced and devoted to the care of the injured patient. If this is not the director, an anesthesiology liaison with the same qualifications should be identified. Anesthesiologists on the trauma team must have successfully completed an anesthesia residency program approved by the Accreditation Council for Graduate Medical Education, the American Board of Osteopathic Specialties and have board certification in anesthesia. One anesthesiologist should maintain commitment to education in trauma related anesthesia.
- 6. Anesthesia must be available in-house 24 hours/day with a mechanism established to ensure early notification of the on-call anesthesiologist. Anesthesia requirements may be fulfilled by anesthesia chief residents or Certified Registered Nurse Anesthetist (CRNA) who are capable of assessing emergent situations in trauma patients and of providing indicated treatment, including initiation of surgical anesthesia. When the CRNA or chief resident is used to meet this requirement, the staff Anesthesiologist will be advised and promptly available at all times and present for operations. Trauma centers must document conditions when the anesthesiologist must be immediately available for airway emergencies and operative management of the trauma patient. The availability of the

anesthesiologist and the absence of delays in operative anesthesia must be documented and monitored by the PI process. The anesthesiologist participating on the trauma team must participate in the Multidisciplinary Trauma Committee and the trauma PI process.

7. The list of required equipment necessary for Surgery can be found on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

Source: Miss. Code Ann. § 41-59-5

#### Rule 2.3.3. Post Anesthesia Care Unit (PACU)

- 1. Level I trauma centers must have a PACU staffed 24 hours/day and available to the postoperative trauma patient. Frequently it is advantageous to bypass the PACU and directly admit to the ICU. In this instance, the ICU may meet these requirements.
- 2. PACU nurses must show evidence of completion of a structured in-service program. There must be a written plan ensuring nurses maintain ongoing trauma specific education.
- 3. PACU staffing should be in sufficient numbers to meet the critical needs of the trauma patient.
- 4. The list of required equipment necessary for PACU can be found on line at http://msdh.ms.gov/msdhsite/ static/49.html.

Source: Miss. Code Ann. § 41-59-5

#### Rule 2.3.4. Intensive Care Unit (ICU)

- 1. Level I trauma centers must have an Intensive Care Unit (ICU) that meets the needs of the adult trauma patient.
- 2. The surgical director for the ICU which houses trauma patients must have obtained critical care training during residency or fellowship and must have expertise in the preoperative and post injury care of the injured patient. This is best demonstrated by a certificate of added qualification in surgical critical care from the American Board of Surgery and may also be fulfilled by documentation of active participation during the preceding 12 months in trauma patients' ICU care and ICU administration and critical care-related continuing medical education. The director is responsible for the quality of care and administration of the ICU and will set policy and establish standards of care to meet the unique needs of the trauma patient.
- 3. The trauma service assumes and maintains responsibility for the care of the multiple injured patient. A surgically directed ICU physician team is essential. The team will provide in-house physician coverage for all ICU trauma patients at

all times. This service can be staffed by appropriately trained physicians from different specialties, but must be led by a qualified surgeon as determined by critical care credentials consistent with the medical staff privileging process of the institution.

- 4. There must be in-house physician coverage for the ICU at all times. A physician credentialed by the facility for critical care should be promptly available to the trauma patient in the ICU 24 hours/day. This coverage is for emergencies only and is not intended to replace the primary surgeon but rather is intended to ensure that the patient's immediate needs are met while the surgeon is contacted.
- 5. The trauma service should maintain the responsibility for the care of the patient as long as the patient remains critically ill. The trauma service must remain in charge of the patient and coordinate all therapeutic decisions. The responsible trauma surgeon or designee should write all orders. The trauma surgeon should maintain control over all aspects of care, including but not limited to respiratory care and management of mechanical ventilation; placement and use of pulmonary catheters; management of fluid and electrolytes, antimicrobials, and enteral and parenteral nutrition.
- 6. Level I Trauma Centers must provide staffing in sufficient numbers to meet the critical needs of the trauma patient. Critical care nurses must show evidence of completion of a structured in-service program. There must be a written plan ensuring nurses maintain ongoing trauma specific education. ICU nurses are integral part of the trauma team and as such, should be represented on the Multidisciplinary Trauma Committee and participate in the PI process of the trauma program.
- 7. The list of required equipment necessary for the ICU can be found on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

Source: Miss. Code Ann. § 41-59-5

Rule 3.1.7. Trauma Team: The team approach is optimal in the care of the multiple injured patient. There must be identified members of the trauma team. Policies should be in place describing the respective role of all personnel on the trauma team. The composition of the trauma team in any hospital will depend on the characteristics of that hospital and its staff. In some instances, a tiered response may be appropriate. If a tiered response is employed, written policy must be in place and the system monitored by the PI process. The team leader must be a qualified general surgeon. All physicians and mid-level providers (Physician Assistant/Nurse Practitioner) on the trauma team responsible for directing the initial resuscitation of the trauma patients must be currently certified in The American College of Surgeons Advanced Trauma Life Support (ATLS). ATLS requirements are waived for Board Certified Emergency Medicine and Board Certified General Surgery Physicians. Composition of the trauma team for a severely injured patient shall include:

- 1. Emergency Physicians and/or mid-level providers (Physician Assistant/Nurse Practitioner)\*
- 2. General/Trauma Surgeon\*
- 3. Physician Specialist
- 4. Anesthesiologist
- 5. Pediatricians
- 6. Nurses: ED\*, OR, ICU, etc.
- 7. Laboratory Technicians as dictated by clinical needs
- 8. Mental Health/Social Services/ Radiology Technicians
- 9. Pastoral Care
- 10. Respiratory Therapists
- 11. Security Officers
  - \* Mandatory for all Alpha Alerts/Activations.

# Rule 3.1.8. Multidisciplinary Trauma Committee

- 1. The purpose of the committee is to provide oversight and leadership to the entire trauma program. The exact format will be hospital specific and may be accomplished by collaboration with another designated trauma center in the region. Each trauma center may choose to have one or more committee to accomplish the tasks necessary. One committee should be multidisciplinary and focus on program oversight and leadership. The major focus will be on PI activities, policy development, communication among all team members, establishment of standards of care, education and outreach programs, and injury prevention. The committee has administrative and systematic control and oversees implementation of all program related services, meets regularly, takes attendance, maintains minutes and works to correct overall program deficiencies to optimize patient care. Membership for the committee includes representatives from:
  - a. Emergency Medicine
  - b. General Surgery
  - c. Orthopedics

- d. Neurosurgery
- e. Anesthesia
- f. Operating Room
- g. Intensive Care
- h. Respiratory Therapy
- i. Radiology
- j. Laboratory
- k. Rehabilitation
- 1. Pre-hospital Care Providers
- m. Administration
- n. Pediatrics
- o. Nursing
- p. Trauma Program Manager
- q. Trauma Medical Director (Chairman; must be present > 50%)
- 2. The clinical managers (or designees) of the departments involved with trauma care should play an active role with the committee.
- 3. The trauma center may wish to accomplish performance improvement activities at this same committee or develop a separate peer review committee. This committee should handle peer review independent from department based review. This committee must be multidisciplinary, meet regularly, and maintain attendance and minutes. This committee must report findings to the overall hospital performance improvement program.

### Rule 3.3.1. Emergency Department

1. The facility must have an emergency department, division, service, or section staffed so trauma patients are assured immediate and appropriate initial care. The emergency physician must be in-house 24 hours/day and immediately available at all times. The emergency department medical director must meet the recommended requirements related to commitment, experience, continuing education, ongoing credentialing, and board certification in emergency medicine.

- 2. The director of the emergency department, along with the trauma director, will establish trauma-specific credentials that should exceed those that are required for general hospital privileges. Examples of credentialing requirements would include skill proficiency, training requirements, conference attendance, education requirements, ATLS verification and specialty board certification. ATLS requirements are waived for Board Certified Emergency Medicine and Board Certified General Surgery Physicians.
- 3. The emergency medicine physician or designee will be responsible for activating the trauma team based on predetermined response protocols. He will provide team leadership and care for the trauma patient until the arrival of the surgeon in the resuscitation area. The emergency department must have established standards and procedures to ensure immediate and appropriate care for the adult and pediatric trauma patient. The emergency department medical director, or his/her designee, must act as a liaison and participate with the Multidisciplinary Trauma Committee and the trauma PI process.
- 4. There should be an adequate number of RN's staffed for the trauma resuscitation area in-house 24 hours/day. Emergency nurses staffing the trauma resuscitation area must be a current provider of Trauma Nurse Core Curriculum (TNCC) and participate in the ongoing PI process of the trauma program. There must be a written plan ensuring nurses maintain ongoing trauma specific education. Nurses must obtain TNCC within 18 months of assignment to the ER.
- 5. The list of required equipment necessary for the ED can be found on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

### Rule 3.3.2. Surgical Suites/Anesthesia

- 1. It is recommended that the OR be staffed and available in-house 24 hours/day. If the staff is not in-house, hospital policy must be written to assure notification and prompt response. The PI process must document and monitor the ongoing availability of OR crews and absence of delay.
- 2. The OR nurses should participate in the care of the trauma patient and be competent in the surgical stabilization of the major trauma patient.
- 3. The surgical nurses are an integral member of the trauma team and must participate in the ongoing PI process of the trauma program and must be represented on the Multidisciplinary Trauma Committee.
- 4. The OR supervisor must be able to demonstrate a prioritization scheme to assure the availability of an operating room for the emergent trauma patient during a

- busy operative schedule. There must be an on-call system for additional personnel for multiple patient admissions.
- 5. The anesthesia department in a Level II trauma center should be ideally organized and run by an anesthesiologist who is experienced and devoted to the care of the injured patient. If this is not, the director, an anesthesiologist liaison with the same qualifications should be identified. Anesthesiologists on the trauma team must have successfully completed an anesthesia residency program approved by the Accreditation Council for Graduate Medical Education, the American Board of Osteopathic Specialties, or the American Osteopathic Board and should have board certification in anesthesia. One anesthesiologist should maintain commitment to education in trauma related anesthesia. Anesthesiologists must demonstrate evidence of participation in the internal trauma education plan.
- 6. Anesthesia must be available 24 hours/day with a mechanism established to ensure notification of the on-call anesthesiologist. Anesthesia requirements may be fulfilled by anesthesia chief residents or Certified Registered Nurse Anesthetists (CRNAs) who are capable of assessing emergent situations in trauma patients and of providing an indicated treatment, including initiation of surgical anesthesia. When the CRNA or chief resident is used to meet this requirement, the staff Anesthesiologist will be advised and promptly available at all times and present for operations. Trauma centers must document conditions when the anesthesiologist must be immediately available for airway emergencies and operative management of the trauma patient. The availability of the anesthesiologist and the absence of delays in operative anesthesia must be documented and monitored by the PI process. The anesthesiologist participating on the trauma team should have the necessary educational background in the care of the trauma patient; participate in the Multidisciplinary Trauma Committee and the trauma PI process.
- 7. The list of required equipment necessary for Surgery and Anesthesia can be found on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

### Rule 3.3.3. Post Anesthesia Care Unit (PACU)

1. It is essential to have a PACU staffed 24 hours/day and available to the postoperative trauma patient. If the staff is not in-house, Hospital policy must be written to assure early notification and prompt response. The PI process must document and monitor the ongoing availability of OR crews and absence of delay. Frequently it is advantageous to bypass the PACU and directly admit to the ICU. In this instance, the ICU may meet these requirements.

- 2. PACU nurses must show evidence of completion of a structured in-service program. There must be a written plan ensuring nurses maintain ongoing trauma specific education.
- 3. PACU staffing should be in sufficient numbers to meet the critical needs of the trauma patient.
- 4. The list of required equipment necessary for the PACU can be found on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

# Rule 3.3.4. Intensive Care Unit (ICU)

- 1. Level II trauma centers must have an Intensive Care Unit (ICU) that meets the needs of the adult trauma patient.
- 2. The surgical director for the ICU which houses trauma patients must have obtained critical care training during residency or fellowship and must have expertise in the preoperative and post injury care of the injured patient. This is best demonstrated by a certificate of added qualification in surgical critical care from the American Board of Surgery and may also be fulfilled by documentation of active participation during the preceding 12 months in trauma patients' ICU care and ICU administration and critical care-related continuing medical education. The director is responsible for the quality of care and administration of the ICU and will set policy and establish standards of care to meet the unique needs of the trauma patient.
- 3. The trauma service assumes and maintains responsibility for the care of the multiple injured patient. A surgically directed ICU physician team is desirable. The team will provide in-house physician coverage for all ICU trauma patients at all times. This service can be staffed by appropriately trained physicians from different specialties, but must be led by a qualified surgeon as determined by critical care credentials consistent with the medical staff privileging process of the institution.
- 4. There should be physician coverage for the ICU at all times. A physician credentialed by the facility for critical care should be promptly available to the trauma patient in the ICU 24 hours/day. This coverage is for emergencies only and is not intended to replace the primary surgeon but rather is intended to ensure that the patient's immediate needs are met while the surgeon is contacted.
- 5. The trauma service should maintain the responsibility for the care of the patient as long as the patient remains critically ill. The trauma service must remain in charge of the patient and coordinate all therapeutic decisions. The responsible trauma surgeon or designee should write all orders. The trauma surgeon should maintain control over all aspects of care, including but not limited to respiratory

care and management of mechanical ventilation; placement and use of pulmonary catheters; management of fluid and electrolytes, antimicrobials, and enteral and parenteral nutrition.

- 6. Level II trauma centers must provide staffing in sufficient numbers to meet the critical needs of the trauma patient. Critical care nurses must show evidence of completion of a structured in-service program. There must be a written plan ensuring nurses maintain ongoing critical care education. ICU nurses are an integral part of the trauma team and as such, should be represented on the Multidisciplinary Trauma Committee and participate in the PI process of the trauma program.
- 7. The list of required equipment necessary for the ICU can be found on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

Source: Miss. Code Ann. § 41-59-5

- Rule 4.1.7. Trauma Team: The team approach is optimal in the care of the multiple injured patients. There must be identified members of the trauma team. Policies should be in place describing the roles of all personnel on the trauma team. The composition of the trauma team in any hospital will depend on the characteristics of that hospital and its resources. In some instances, a tiered response may be appropriate. If a tiered response is employed written policy must be in place and the system monitored by the PI process. The team leader must be a qualified general surgeon. All physicians and mid-level providers (Physician Assistant/Nurse Practitioner) on the trauma team responsible for directing the initial resuscitation of the trauma patients must be currently certified in The American College of Surgeons Advanced Trauma Life Support (ATLS). ATLS requirements are waived for Board Certified Emergency Medicine and Board Certified General Surgery Physicians. Composition of the trauma team for severely injured patients includes:
  - 1. Emergency Physicians and/or mid-level providers (Physician Assistant/Nurse Practitioner)\*
  - 2. General/Trauma Surgeons\*
  - 3. Physician Specialists
  - 4. Laboratory Technicians as dictated by clinical needs
  - 5. Nursing: ED\*, OR, ICU, etc.
  - 6. Auxiliary Support Staff
  - 7. Respiratory Therapists
  - 8. Security Officers

\* Mandatory for all Alpha Alerts/Activations.

Source: Miss. Code Ann. § 41-59-5

## Rule 4.1.8. Multidisciplinary Trauma Committee

- 1. The purpose of the committee is to provide oversight and leadership to the entire trauma program. The exact format will be hospital specific and may be accomplished by collaboration with another designated trauma center in the region. The major focus will be on PI activities, policy development, communication among all team members, development of standards of care, education and outreach programs, and injury prevention. The committee has administrative and systematic control and oversees the implementation of the process which includes all program related services, meets regularly, takes attendance, maintains minutes and works to correct overall program deficiencies to optimize patient care. Membership for the committee includes representatives (if available in the community) from:
  - a. Emergency Medicine
  - b. General Surgery
  - c. Orthopedics
  - d. Neurosurgery
  - e. Anesthesia
  - f. Operating Room
  - g. Intensive Care
  - h. Respiratory Therapy
  - i. Radiology
  - j. Laboratory
  - k. Rehabilitation
  - 1. Pre-hospital Care Providers
  - m. Administration
  - n. Pediatrics
  - o. Nursing
  - p. Trauma Program Manager

- q. Trauma Medical Director (Chairman; must be present > 50%)
- 2. The clinical managers (or designees) of the departments involved with trauma care should play an active role with the committee.
- 3. The trauma center may wish to accomplish performance improvement activities in this committee or develop a separate peer review committee. This committee should handle peer review independent from department based review. The committee must meet regularly and maintain attendance and minutes. This committee must report findings to the overall hospital performance improvement program.

# Rule 4.3.1. Emergency Department

- 1. The facility must have an emergency department, division, service or section staffed so those trauma patients are assured immediate and appropriate initial care. The emergency physician and/or mid level providers must be in-house 24 hours/day, immediately available at all times, and capable of evaluating trauma patients and providing initial resuscitation. The emergency medicine physician will provide team leadership and care for the trauma patient until the arrival of the surgeon in the resuscitation area. The emergency department must have established standards and procedures to ensure immediate and appropriate care for the adult and pediatric trauma patient. The medical director for the department, or his designee, must participate with the Multidisciplinary Trauma Committee and the trauma PI process.
- 2. The director of the emergency department, along with the TMD, may establish trauma-specific credentials that should exceed those that are required for general hospital privileges (i.e., ATLS verification).
- 3. There should be an adequate number of RN's staffed for the trauma resuscitation area in-house 24 hours/day. Emergency nurses staffing the trauma resuscitation area must be a current provider of TNCC and participate in the ongoing PI process of the trauma program. There must be a written plan ensuring nurses maintain ongoing trauma specific education. Nurses must obtain TNCC within 18 months of assignment to the ER.
- 4. The list of required equipment necessary for the ED can be found on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

Source: Miss. Code Ann. § 41-59-5

### Rule 4.3.2. Surgical Suites/Anesthesia

- 1. The surgical team must be on-call with a well-defined mechanism for notification to expedite transfer to the operating room if the patient's condition warrants. The process should be monitored by trauma PI program.
- 2. The OR nurses should participate in the care of the trauma patient and be competent in the surgical stabilization of the major trauma patient.
- 3. The surgical nurses are integral members of the trauma team and must participate in the ongoing PI process of the trauma program and must be represented on the Multidisciplinary Trauma Committee.
- 4. The OR supervisor must be able to demonstrate a prioritization scheme to assure the availability of an operating room for the emergent trauma patient during a busy operative schedule.
- 5. Anesthesia must be promptly available with a mechanism established to ensure notification of the on-call anesthesiologist. The Level III trauma center must document conditions when the anesthesiologist must be immediately available for airway emergencies and operative management of the trauma patient.
- 6. Anesthesiologists on the trauma team must have successfully completed an anesthesia residency program approved by the Accreditation Council for Graduate Medical Education, the American Board of Osteopathic Specialties, or the American Osteopathic Board and should have board certification in anesthesia.
- Anesthesia requirements may be fulfilled by Certified Registered Nurse Anesthetists (CRNAs) and/or anesthesia residents who are capable of assessing emergent situations in trauma patients and of providing an indicated treatment, including initiation of surgical anesthesia. When the CRNA is used to meet this requirement, the staff Anesthesiologist will be advised and promptly available at all times and present for operations. Trauma centers must document conditions when the anesthesiologist must be immediately available for airway emergencies and operative management of the trauma patient. The availability of the anesthesiologist and the absence of delays in operative anesthesia must be documented and monitored by the PI process. The anesthesiologist participating on the trauma team should have the necessary educational background in the care of the trauma patient; participate in the Multidisciplinary Trauma Committee and the trauma PI process.
- 8. The list of required equipment necessary for Surgery and Anesthesiology can be found on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

#### Rule 4.3.3. Post Anesthesia Care Unit (PACU)

1. A Level III trauma center must have a PACU available 24 hours/day to the postoperative trauma patient. Hospital policy must be written to assure early

notification and prompt response. Frequently, it is advantageous to bypass the PACU and directly admit to the ICU. In this instance, the ICU may meet these requirements.

- 2. PACU nurses must show evidence of completion of a structured in-service program. There must be a written plan ensuring nurses maintain ongoing critical care education. PACU staffing should be in sufficient numbers to meet the critical need of the trauma patient.
- 3. The list of required equipment necessary for the PACU can be found on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

Source: Miss. Code Ann. § 41-59-5

### Rule 4.3.4. Intensive Care Unit (ICU)

- 1. The ICU must have a surgical director or surgical co-director who is responsible to set policy and administration and establish standards of care to meet the unique needs of the trauma patient. He/she is responsible for the quality of care and administration of the ICU. The trauma medical director must work to assure trauma patients admitted to the ICU will be admitted under the care of a general surgeon or appropriate surgical subspecialists. In addition to overall responsibility for patient care by the primary surgeon, it is desirable to have inhouse physician coverage for the ICU at all times. This may be provided by a hospitalist or emergency physician.
- 2. Level III Trauma Center should provide staffing in sufficient numbers to meet the needs of the trauma patient. There must be a written plan ensuring nurses maintain ongoing critical care education. ICU nurses are an integral part of the trauma team and as such, should be represented on the Multidisciplinary Trauma Committee and participate in the PI process of the trauma program.
- 3. ICU nurses must show evidence of completion of a structured in-service program. There must be a written plan ensuring nurses maintain ongoing trauma specific education.
- 4. The list of required equipment necessary for the ICU can be found on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

Source: Miss. Code Ann. § 41-59-5

Rule 4.4.10 Education: Level III Trauma Centers must have internal trauma education programs for physicians, mid-level providers, nurses, and pre-hospital providers (when employed by the hospital).

Source: Miss. Code Ann. § 41-59-5

Rule 5.1.7. Multidisciplinary Trauma Committee

- 1. The purpose of the committee is to provide oversight and leadership to the entire trauma program. The exact format will be hospital specific and may be accomplished by collaboration with another designated trauma center in the system. The major focus will be on PI activities, policy development, communication among all team members, development of standards of care, education and outreach programs, and injury prevention. The committee oversees the implementation of the process which includes all program related services, meets regularly, takes attendance, maintains minutes and works to correct overall program deficiencies to optimize patient care. Membership for the committee includes representatives (if available in the community) from:
  - a. Emergency Medicine
  - b. Respiratory Therapy
  - c. Radiology
  - d. Laboratory
  - e. Rehabilitation
  - f. Pre-hospital Care Providers
  - g. Administration
  - h. Nursing
  - i. Trauma Program Manager
  - j. Trauma Medical Director (Chairman, must be present > 50%)
- 2. The clinical managers (or designees) of the departments involved with trauma care should play an active role with the committee.
- 3. The trauma center may wish to accomplish performance improvement activities in this committee or develop a separate peer review committee. This committee should handle peer review independent from department based review. The committee must meet regularly and maintain attendance and minutes. This committee must report findings to the overall hospital performance improvement program.

### Rule 5.3.1. Emergency Department

1. The facility must have an emergency department staffed so trauma patients are assured immediate and appropriate initial care. There must be a designated physician director. It is not anticipated that a physician will be available on-call

to an emergency department in a Level IV Trauma Center; however it is a desirable characteristic of a Level IV. The on-call practitioner must respond to the emergency department based on local written criteria. A system must be developed to assure early notification of the on-call practitioner. Compliance with this criterion must be documented and monitored by the Trauma Performance Improvement process.

- 2. All physicians and mid-level providers (Physician Assistant/Nurse Practitioner) on the trauma team responsible for directing the initial resuscitation of the trauma patients must be currently certified in The American College of Surgeons Advanced Trauma Life Support (ATLS). ATLS requirements are waived for Board Certified Emergency Medicine and Board Certified General Surgery Physicians. Rural Trauma Course (RTC) may be substituted for ATLS at Level IV Trauma Centers.
- 3. Emergency nurses staffing the trauma resuscitation area must be a current provider in TNCC. Nurses must obtain TNCC within 18 months of assignment to the ER. Adequate numbers of nurses must be available in-house 24 hours/day, to meet the need of the trauma patient. The nurse may perform other patient care activities within the hospital when not needed in the emergency department.
- 4. Compliance with the above will be evidenced by:
  - a. Published on-call list of practitioners to the Emergency Department;
  - b. Written trauma specific education plan for nurses;
  - c. Documentation of nursing staffing patterns to assure 24-hour coverage.
  - d. The list of required equipment necessary for the ED can be found on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

Source: Miss. Code Ann. § 41-59-5

Rule 5.4.6 Education: Level IV Trauma Centers must have internal trauma education programs for physicians, mid-level providers, nurses, and pre-hospital providers (when employed by the hospital).

Source: Miss. Code Ann. § 41-59-5

### Rule 6.2.9. Required Clinical Components

1. Secondary pediatric trauma centers must have published on-call schedules and have the following medical specialists immediately available 24 hours/day to the injured pediatric patient:

- 2. Pediatric Emergency Medicine (in-house 24 hours/day). Emergency Physician and/or mid-level provider (Physician Assistant/Nurse Practitioner) must be in the specified trauma resuscitation area upon patient arrival.
- 3. Trauma/General or Pediatric Surgery. It is desirable that a back up surgeon schedule is published. It is desirable that the surgeon on-call is dedicated to the pediatric trauma center and not on-call to any other hospital while on pediatric trauma call. A system should be developed to assure notification of the on-call surgeon and compliance with these criteria and their appropriateness must be documented and monitored by the PI process. Response time for Alpha Alert/Activations is 30 minutes and starts at patient arrival or EMS notification, whichever is shorter. Response time for Bravo Alerts/Activations is 45 minutes from patient arrival.
- 4. Orthopedic Surgery. It is desirable that a back up surgeon schedule is published. It is desirable that the surgeon on-call is dedicated to the pediatric trauma center and not on-call to any other hospital while on pediatric trauma call. A system should be developed to assure notification of the on-call surgeon and compliance with these criteria and their appropriateness must be documented and monitored by the PI process. Response time for all trauma activations is 60 minutes from the time notified to respond.
- 5. Anesthesia. Anesthesia must be immediately available with a mechanism established to ensure early notification of the on-call anesthesiologist. Anesthesia must be available 24 hours/day. Anesthesia chief residents or certified nurse anesthetist (CRNA) may fill this requirement. When residents or CRNAs are utilized, the staff anesthesiologist on-call will be advised, promptly available, and present for all operations. Hospital policy must be established to determine when the anesthesiologist must be immediately available for airway control and assisting with resuscitation. The availability of the anesthesiologist and the absence of delays in airway control or operative anesthesia must be documented and monitored by the PI process. The maximum response time for all trauma patients is 30 minutes from the time notified to respond.
- 6. The following specialists must be on-call and promptly available:
  - a. Pediatrics
  - b. Radiology
- 7. It is desirable (although not required) to have the following specialists available to the secondary pediatric trauma center:
  - a. Hand Surgery
  - b. Obstetrics/Gynecology Surgery
  - c. Ophthalmic Surgery

- d. Oral/Maxillofacial Surgery
- e. Plastic Surgery
- f. Critical Care Medicine
- g. Thoracic Surgery\*
  - \* The trauma surgeon is presumed to be qualified and have privileges to provide emergency thoracic surgical care to pediatric patients with thoracic injuries. If this is not the case, the facility should have a board-certified thoracic surgeon immediately available for the injured pediatric patient (within 30 minutes of the time notified to respond).
- 8. The staff specialist on-call will be notified at the discretion of the trauma surgeon and will be promptly available. The PI program will continuously monitor this availability.
- 9. Policies and procedures should exist to notify the patient's primary physician of the patient's condition at an appropriate time.

## Title 15 - Mississippi Department of Health

# **Part 12 - Bureau of Emergency Medical Services**

#### Subpart 32 - Trauma System

Rule 1.2.8. Term of Trauma Center Designations: The department shall designate Trauma Centers for a period not to exceed three (3) years. Designations shall remain active for three years provided no substantive changes or variances have occurred. The Department (and Trauma Care Regions for Level IV Trauma Centers only) may perform periodic trauma center audit/reviews at each designated Trauma Center. The State Health Officer (SHO) may extend Trauma Center designations for one (1) year.

Source: Miss. Code Ann. § 41-59-5

- Rule 1.3.5. Trauma Care Trust Fund Distribution Calculation: Amounts to be disbursed from the Trauma Care Trust Fund (TCTF) shall be calculated as follows:
  - 1. On or about April 1 and October 1 of each year, or at such other times as the State Health Officer may direct, the Trauma System Administrator (TSA) shall obtain a Treasury report showing the fund balance in the TCTF.
  - 2. To obtain the amount to be distributed, the following amounts will be subtracted from the fund balance:
    - a. One half of an amount to be determined by the Department for administrative expenses of the Department Division of Trauma as of the date of the calculation;
    - b. One half of an amount not to exceed Ten Thousand Dollars (\$10,000) for each Level IV Trauma Center which has completed at least one year of satisfactory participation in the Mississippi Trauma Care System as of the date of the calculation (annual stipend);
    - c. One half of an amount not to exceed Ten Thousand Dollars (\$10,000) for each Level IV Trauma Center which has completed at least one year of satisfactory participation in the Mississippi Trauma Care System as of the date of the calculation (educational grant); and
    - d. One half of an amount to be determined by the Department, and approved by the MTAC, for administrative expenses for each Trauma Care Region, as of the date of the calculation.

3. The amount remaining after the above administrative payments have been calculated, reserved and/or expended, shall be distributed according to the TCTF formula (refer to Appendix A C for a graphic representation).

Source: Miss. Code Ann. § 41-59-5

## Rule 1.3.7. Trauma Card Trust Fund Hospital Fixed Distribution

- 1. Eighty-five percent (85%) of the amount remaining after administrative expenses shall be distributed to the Trauma Regions for further distribution to participating Trauma Centers.
- 2. Thirty percent (30%) of the amount reserved for distribution to hospitals shall be distributed according to a "Fixed Distribution," based on the designated level of each eligible Trauma center.
- 3. For purposes of determining amounts to be distributed to Trauma Centers pursuant to this rule, the following definitions shall apply:
  - a. Number of Facilities the number of licensed acute care facilities designated as a Level I, Level II or Level III Trauma Centers
  - b. Relative Weights Level I shall equal 100%; Level II shall equal 87.5%; Level III shall equal 62.5%
  - c. Calculated Weight Equals the number of facilities designated at a particular level of trauma center multiplied by the relative weight.
  - d. Total Weight equals the sum of calculated weights
  - e. Disbursement by Hospital Type equals Total Hospital Fixed Fund / Total Weight X Relative Weight
  - f. Total Disbursement by Hospital Type equals the sum of Disbursement by Hospital Type
- 4. To calculate the Hospital Fixed Distribution, the following formula is used (refer to Appendix  $\underline{A} \underline{C}$  for a graphic representation):
  - a. Multiply the number of facilities in each category (Level I, Level II and Level III) by the relative weights of each category. The product of this operation shall be the calculated weight of each type facility.
  - b. Sum the relative weights to obtain the "calculated weight."

- c. Divide the total Hospital Fixed Distribution amount by the product of the sum of the relative weights ("calculated weight") and the relative weight assigned to that category.
- d. The result is the amount to be distributed to each facility of that particular type (Level I, Level II or Level III).

## Rule 2.1.7 Multidisciplinary Trauma Committee

- 1. The purpose of the committee is to provide oversight and leadership to the entire trauma program. The exact format will be hospital specific and may be accomplished by collaboration with another designated trauma center in the region. Each trauma center may choose to have one or more committees as needed to accomplish the task. One committee should be multi-disciplinary and focus on program oversight and leadership. The major focus will be on PI activities, policy development, communication among all team members, and establishment of standards of care, and education and outreach programs for injury prevention. The committee has administrative and systematic control and oversees implementation of all program related services, meets regularly, takes attendance, maintains minutes and works to correct overall program deficiencies to optimize patient care. Membership for the committee includes representatives from:
  - a. Emergency Medicine
  - b. General Surgery
  - c. Orthopedics
  - d. Neurosurgery
  - e. Anesthesia
  - f. Operating Room
  - g. Intensive Care
  - h. Respiratory Therapy
  - i. Radiology
  - j. Laboratory
  - k. Rehabilitation
  - 1. Pre-hospital Care Providers

- m. Administration
- n. Pediatrics
- o. Nursing
- p. Trauma Program Manager
- q. Trauma Medical Director (Chairman; must be present > 50%)
- 2. The clinical managers (or designees) of the departments involved with trauma care should play an active role with the committee.
- 3. The trauma center may wish to accomplish performance improvement activities in this committee or develop a separate peer review committee. This committee should handle peer review independent from department based review. The committee must meet regularly and maintain attendance and minutes. This committee must report findings to the overall hospital performance improvement program.

### Rule 2.3.1. Emergency Department

- 1. The facility must have an emergency department, division, service, or section staffed so trauma patients are assured immediate and appropriate initial care. The emergency physician and/or mid-level provider (Physician Assistant/Nurse Practitioner) must be in-house 24 hours/day and immediately available at all times. The emergency department medical director must meet the recommended requirements related to commitment, experience, continuing education, ongoing credentialing, and board certification in emergency medicine.
- 2. The director of the emergency department, along with the Trauma Medical Director, will establish trauma-specific credentials that should exceed those that are required for general hospital privileges. Examples of credentialing requirements would include skill proficiency, training requirements, conference attendance, education requirements, ATLS verification and specialty board certification.
- 3. The emergency medicine physician will be responsible for activating the trauma team based on predetermined response protocols. He will provide team leadership and care for the trauma patient until the arrival of the surgeon in the resuscitation area. The emergency department must have established standards and procedures to ensure immediate and appropriate care for the adult and pediatric trauma patient. The emergency department medical director, or his/her designee, must act as a liaison and participate with the Multidisciplinary Trauma Committee and the trauma PI process.

- 4. There shall be an adequate number of RN's staffing the trauma resuscitation area in-house 24 hours/day. Emergency nurses staffing the trauma resuscitation area must be a current provider of Trauma Nurse Core Curriculum (TNCC) and participate in the ongoing PI process of the trauma program. There must be a written plan ensuring nurses maintain ongoing trauma specific education. Nurses must obtain TNCC within 18 months of assignment to the ER.
- 5. The list of required equipment necessary for the ED can be found at the end of this Chapter can be found on-line at http://msdh.ms.gov/msdhsite/static/49.html.

### Rule 2.3.2. Surgical Suites/Anesthesia

- 1. The operating room (OR) must be staffed and available in-house 24 hours/day.
- 2. The OR nurses should participate in the care of the trauma patient and be competent in the surgical stabilization of the major trauma patient.
- 3. The surgical nurses are an integral member of the trauma team, and must participate in the ongoing PI process of the trauma program and be represented on the Multidisciplinary Trauma Committee.
- 4. The OR supervisor must be able to demonstrate a prioritization scheme to assure the availability of an operating room for the emergent trauma during a busy operative schedule. There must be an on-call system for additional personnel for multiple patient admissions.
- 5. The anesthesia department in a Level I Trauma Center should be ideally organized and run by an anesthesiologist who is highly experienced and devoted to the care of the injured patient. If this is not the director, an anesthesiology liaison with the same qualifications should be identified. Anesthesiologists on the trauma team must have successfully completed an anesthesia residency program approved by the Accreditation Council for Graduate Medical Education, the American Board of Osteopathic Specialties and have board certification in anesthesia. One anesthesiologist should maintain commitment to education in trauma related anesthesia.
- 6. Anesthesia must be available in-house 24 hours/day with a mechanism established to ensure early notification of the on-call anesthesiologist. Anesthesia requirements may be fulfilled by anesthesia chief residents or Certified Registered Nurse Anesthetist (CRNA) who are capable of assessing emergent situations in trauma patients and of providing indicated treatment, including initiation of surgical anesthesia. When the CRNA or chief resident is used to meet this requirement, the staff Anesthesiologist will be advised and promptly available at all times and present for operations. Trauma centers must document conditions when the anesthesiologist must be immediately available for airway emergencies

and operative management of the trauma patient. The availability of the anesthesiologist and the absence of delays in operative anesthesia must be documented and monitored by the PI process. The anesthesiologist participating on the trauma team must participate in the Multidisciplinary Trauma Committee and the trauma PI process.

7. The list of required equipment necessary for Surgery can be found at the end of this chapter on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

Source: Miss. Code Ann. § 41-59-5

### Rule 2.3.3. Post Anesthesia Care Unit (PACU)

- 1. Level I trauma centers must have a PACU staffed 24 hours/day and available to the postoperative trauma patient. Frequently it is advantageous to bypass the PACU and directly admit to the ICU. In this instance, the ICU may meet these requirements.
- 2. PACU nurses must show evidence of completion of a structured in-service program. There must be a written plan ensuring nurses maintain ongoing trauma specific education.
- 3. PACU staffing should be in sufficient numbers to meet the critical needs of the trauma patient.
- 4. The list of required equipment necessary for PACU can be found at the end of this chapter on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

Source: Miss. Code Ann. § 41-59-5

### Rule 2.3.4. Intensive Care Unit (ICU)

- 1. Level I trauma centers must have an Intensive Care Unit (ICU) that meets the needs of the adult trauma patient.
- 2. The surgical director for the ICU which houses trauma patients must have obtained critical care training during residency or fellowship and must have expertise in the preoperative and post injury care of the injured patient. This is best demonstrated by a certificate of added qualification in surgical critical care from the American Board of Surgery and may also be fulfilled by documentation of active participation during the preceding 12 months in trauma patients' ICU care and ICU administration and critical care-related continuing medical education. The director is responsible for the quality of care and administration of the ICU and will set policy and establish standards of care to meet the unique needs of the trauma patient.

- 3. The trauma service assumes and maintains responsibility for the care of the multiple injured patient. A surgically directed ICU physician team is essential. The team will provide in-house physician coverage for all ICU trauma patients at all times. This service can be staffed by appropriately trained physicians from different specialties, but must be led by a qualified surgeon as determined by critical care credentials consistent with the medical staff privileging process of the institution.
- 4. There must be in-house physician coverage for the ICU at all times. A physician credentialed by the facility for critical care should be promptly available to the trauma patient in the ICU 24 hours/day. This coverage is for emergencies only and is not intended to replace the primary surgeon but rather is intended to ensure that the patient's immediate needs are met while the surgeon is contacted.
- 5. The trauma service should maintain the responsibility for the care of the patient as long as the patient remains critically ill. The trauma service must remain in charge of the patient and coordinate all therapeutic decisions. The responsible trauma surgeon or designee should write all orders. The trauma surgeon should maintain control over all aspects of care, including but not limited to respiratory care and management of mechanical ventilation; placement and use of pulmonary catheters; management of fluid and electrolytes, antimicrobials, and enteral and parenteral nutrition.
- 6. Level I Trauma Centers must provide staffing in sufficient numbers to meet the critical needs of the trauma patient. Critical care nurses must show evidence of completion of a structured in-service program. There must be a written plan ensuring nurses maintain ongoing trauma specific education. ICU nurses are integral part of the trauma team and as such, should be represented on the Multidisciplinary Trauma Committee and participate in the PI process of the trauma program.
- 7. There is a complete list of necessary equipment for the ICU at the end of this chapter. The list of required equipment necessary for the ICU can be found on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

#### Rule 2.4.12 Essential and Desirable Chart for Level 1 Trauma Center (Reserved)

Rule 3.1.7. Trauma Team: The team approach is optimal in the care of the multiple injured patient. There must be identified members of the trauma team. Policies should be in place describing the respective role of all personnel on the trauma team. The composition of the trauma team in any hospital will depend on the characteristics of that hospital and its staff. In some instances, a tiered response may be appropriate. If a tiered response is employed, written policy must be in place and the system monitored by the PI process. The team leader must be a qualified

general surgeon. All physicians and mid-level providers (Physician Assistant/Nurse Practitioner) on the trauma team responsible for directing the initial resuscitation of the trauma patients must be currently certified in The American College of Surgeons Advanced Trauma Life Support (ATLS). ATLS requirements are waived for Board Certified Emergency Medicine and Board Certified General Surgery Physicians. Composition of the trauma team for a severely injured patient shall include:

- 1. Emergency Physicians and/or mid-level providers (Physician Assistant/Nurse Practitioner)\*
- 2. General/Trauma Surgeon\*
- 3. Physician Specialist
- 4. Anesthesiologist
- 5. Pediatricians
- 6. Nurses: ED\*, OR, ICU, etc.
- 7. Laboratory Technicians as dictated by clinical needs
- 8. Mental Health/Social Services/ Radiology Technicians
- 9. Pastoral Care
- 10. Respiratory Therapists
- 11. Security Officers

Source: Miss. Code Ann. § 41-59-5

### Rule 3.1.8. Multidisciplinary Trauma Committee

1. The purpose of the committee is to provide oversight and leadership to the entire trauma program. The exact format will be hospital specific and may be accomplished by collaboration with another designated trauma center in the region. Each trauma center may choose to have one or more committee to accomplish the tasks necessary. One committee should be multidisciplinary and focus on program oversight and leadership. The major focus will be on PI activities, policy development, communication among all team members, establishment of standards of care, education and outreach programs, and injury

<sup>\*</sup> Mandatory for all Alpha and Bravo Alerts/Activations.

prevention. The committee has administrative and systematic control and oversees implementation of all program related services, meets regularly, takes attendance, maintains minutes and works to correct overall program deficiencies to optimize patient care. Membership for the committee includes representatives from:

- a. Emergency Medicine
- b. General Surgery
- c. Orthopedics
- d. Neurosurgery
- e. Anesthesia
- f. Operating Room
- g. Intensive Care
- h. Respiratory Therapy
- i. Radiology
- j. Laboratory
- k. Rehabilitation
- 1. Pre-hospital Care Providers
- m. Administration
- n. Pediatrics
- o. Nursing
- p. Trauma Program Manager
- q. Trauma Medical Director (Chairman; must be present > 50%)
- 2. The clinical managers (or designees) of the departments involved with trauma care should play an active role with the committee.
- 3. The trauma center may wish to accomplish performance improvement activities at this same committee or develop a separate peer review committee. This committee should handle peer review independent from department based review. This committee must be multidisciplinary, meet regularly, and maintain attendance and minutes. This committee must report findings to the overall hospital performance improvement program.

## Rule 3.3.1. Emergency Department

- 1. The facility must have an emergency department, division, service, or section staffed so trauma patients are assured immediate and appropriate initial care. The emergency physician must be in-house 24 hours/day and immediately available at all times. The emergency department medical director must meet the recommended requirements related to commitment, experience, continuing education, ongoing credentialing, and board certification in emergency medicine.
- 2. The director of the emergency department, along with the trauma director, will establish trauma-specific credentials that should exceed those that are required for general hospital privileges. Examples of credentialing requirements would include skill proficiency, training requirements, conference attendance, education requirements, ATLS verification and specialty board certification. ATLS requirements are waived for Board Certified Emergency Medicine and Board Certified General Surgery Physicians.
- 3. The emergency medicine physician or designee will be responsible for activating the trauma team based on predetermined response protocols. He will provide team leadership and care for the trauma patient until the arrival of the surgeon in the resuscitation area. The emergency department must have established standards and procedures to ensure immediate and appropriate care for the adult and pediatric trauma patient. The emergency department medical director, or his/her designee, must act as a liaison and participate with the Multidisciplinary Trauma Committee and the trauma PI process.
- 4. There should be an adequate number of RN's staffed for the trauma resuscitation area in-house 24 hours/day. Emergency nurses staffing the trauma resuscitation area must be a current provider of Trauma Nurse Core Curriculum (TNCC) and participate in the ongoing PI process of the trauma program. There must be a written plan ensuring nurses maintain ongoing trauma specific education. Nurses must obtain TNCC within 18 months of assignment to the ER.
- 5. The list of required equipment necessary for the ED can be found at the end of this Chapter on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

Source: Miss. Code Ann. § 41-59-5

## Rule 3.3.2. Surgical Suites/Anesthesia

1. It is recommended that the OR be staffed and available in-house 24 hours/day. If the staff is not in-house, hospital policy must be written to assure notification and prompt response. The PI process must document and monitor the ongoing availability of OR crews and absence of delay.

- 2. The OR nurses should participate in the care of the trauma patient and be competent in the surgical stabilization of the major trauma patient.
- 3. The surgical nurses are an integral member of the trauma team and must participate in the ongoing PI process of the trauma program and must be represented on the Multidisciplinary Trauma Committee.
- 4. The OR supervisor must be able to demonstrate a prioritization scheme to assure the availability of an operating room for the emergent trauma patient during a busy operative schedule. There must be an on-call system for additional personnel for multiple patient admissions.
- 5. The anesthesia department in a Level II trauma center should be ideally organized and run by an anesthesiologist who is experienced and devoted to the care of the injured patient. If this is not, the director, an anesthesiologist liaison with the same qualifications should be identified. Anesthesiologists on the trauma team must have successfully completed an anesthesia residency program approved by the Accreditation Council for Graduate Medical Education, the American Board of Osteopathic Specialties, or the American Osteopathic Board and should have board certification in anesthesia. One anesthesiologist should maintain commitment to education in trauma related anesthesia. Anesthesiologists must demonstrate evidence of participation in the internal trauma education plan.
- 6. Anesthesia must be available 24 hours/day with a mechanism established to ensure notification of the on-call anesthesiologist. Anesthesia requirements may be fulfilled by anesthesia chief residents or Certified Registered Nurse Anesthetists (CRNAs) who are capable of assessing emergent situations in trauma patients and of providing an indicated treatment, including initiation of surgical anesthesia. When the CRNA or chief resident is used to meet this requirement, the staff Anesthesiologist will be advised and promptly available at all times and present for operations. Trauma centers must document conditions when the anesthesiologist must be immediately available for airway emergencies and operative management of the trauma patient. The availability of the anesthesiologist and the absence of delays in operative anesthesia must be documented and monitored by the PI process. The anesthesiologist participating on the trauma team should have the necessary educational background in the care of the trauma patient; participate in the Multidisciplinary Trauma Committee and the trauma PI process.
- 7. The list of required equipment necessary for Surgery and Anesthesia can be found at the end of this Chapter on line at <a href="http://msdh.ms.gov/msdhsite/">http://msdh.ms.gov/msdhsite/</a> static/49.html.

Rule 3.3.3. Post Anesthesia Care Unit (PACU)

- 1. It is essential to have a PACU staffed 24 hours/day and available to the postoperative trauma patient. If the staff is not in-house, Hospital policy must be written to assure early notification and prompt response. The PI process must document and monitor the ongoing availability of OR crews and absence of delay. Frequently it is advantageous to bypass the PACU and directly admit to the ICU. In this instance, the ICU may meet these requirements.
- 2. PACU nurses must show evidence of completion of a structured in-service program. There must be a written plan ensuring nurses maintain ongoing trauma specific education.
- 3. PACU staffing should be in sufficient numbers to meet the critical needs of the trauma patient.
- 4. The list of required equipment necessary for the PACU can be found at the end of this Chapter on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

## Rule 3.3.4. Intensive Care Unit (ICU)

- 1. Level II trauma centers must have an Intensive Care Unit (ICU) that meets the needs of the adult trauma patient.
- 2. The surgical director for the ICU which houses trauma patients must have obtained critical care training during residency or fellowship and must have expertise in the preoperative and post injury care of the injured patient. This is best demonstrated by a certificate of added qualification in surgical critical care from the American Board of Surgery and may also be fulfilled by documentation of active participation during the preceding 12 months in trauma patients' ICU care and ICU administration and critical care-related continuing medical education. The director is responsible for the quality of care and administration of the ICU and will set policy and establish standards of care to meet the unique needs of the trauma patient.
- 3. The trauma service assumes and maintains responsibility for the care of the multiple injured patient. A surgically directed ICU physician team is desirable. The team will provide in-house physician coverage for all ICU trauma patients at all times. This service can be staffed by appropriately trained physicians from different specialties, but must be led by a qualified surgeon as determined by critical care credentials consistent with the medical staff privileging process of the institution.
- 4. There should be physician coverage for the ICU at all times. A physician credentialed by the facility for critical care should be promptly available to the trauma patient in the ICU 24 hours/day. This coverage is for emergencies only

and is not intended to replace the primary surgeon but rather is intended to ensure that the patient's immediate needs are met while the surgeon is contacted.

- 5. The trauma service should maintain the responsibility for the care of the patient as long as the patient remains critically ill. The trauma service must remain in charge of the patient and coordinate all therapeutic decisions. The responsible trauma surgeon or designee should write all orders. The trauma surgeon should maintain control over all aspects of care, including but not limited to respiratory care and management of mechanical ventilation; placement and use of pulmonary catheters; management of fluid and electrolytes, antimicrobials, and enteral and parenteral nutrition.
- 6. Level II trauma centers must provide staffing in sufficient numbers to meet the critical needs of the trauma patient. Critical care nurses must show evidence of completion of a structured in-service program. There must be a written plan ensuring nurses maintain ongoing critical care education. ICU nurses are an integral part of the trauma team and as such, should be represented on the Multidisciplinary Trauma Committee and participate in the PI process of the trauma program.
- 7. The list of required equipment necessary for the PACU ICU can be found at the end of this Chapter on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

Source: Miss. Code Ann. § 41-59-5

#### Rule 3.4.11. Essential and Desirable Chart for Level II Trauma Centers (Reserved)

- Rule 4.1.7. Trauma Team: The team approach is optimal in the care of the multiple injured patients. There must be identified members of the trauma team. Policies should be in place describing the roles of all personnel on the trauma team. The composition of the trauma team in any hospital will depend on the characteristics of that hospital and its resources. In some instances, a tiered response may be appropriate. If a tiered response is employed written policy must be in place and the system monitored by the PI process. The team leader must be a qualified general surgeon. All physicians and mid-level providers (Physician Assistant/Nurse Practitioner) on the trauma team responsible for directing the initial resuscitation of the trauma patients must be currently certified in The American College of Surgeons Advanced Trauma Life Support (ATLS). ATLS requirements are waived for Board Certified Emergency Medicine and Board Certified General Surgery Physicians. Composition of the trauma team for severely injured patients includes:
  - 1. Emergency Physicians and/or mid-level providers (Physician Assistant/Nurse Practitioner)\*
  - 2. General/Trauma Surgeons\*

- 3. Physician Specialists
- 4. Laboratory Technicians as dictated by clinical needs
- 5. Nursing: ED\*, OR, ICU, etc.
- 6. Auxiliary Support Staff
- 7. Respiratory Therapists
- 8. Security Officers
  - \* Mandatory for all Alpha and Bravo Alerts/Activations.

### Rule 4.1.8. Multidisciplinary Trauma Committee

- 1. The purpose of the committee is to provide oversight and leadership to the entire trauma program. The exact format will be hospital specific and may be accomplished by collaboration with another designated trauma center in the region. The major focus will be on PI activities, policy development, communication among all team members, development of standards of care, education and outreach programs, and injury prevention. The committee has administrative and systematic control and oversees the implementation of the process which includes all program related services, meets regularly, takes attendance, maintains minutes and works to correct overall program deficiencies to optimize patient care. Membership for the committee includes representatives (if available in the community) from:
  - a. Emergency Medicine
  - b. General Surgery
  - c. Orthopedics
  - d. Neurosurgery
  - e. Anesthesia
  - f. Operating Room
  - g. Intensive Care
  - h. Respiratory Therapy
  - i. Radiology
  - i. Laboratory

- k. Rehabilitation
- 1. Pre-hospital Care Providers
- m. Administration
- n. Pediatrics
- o. Nursing
- p. Trauma Program Manager
- q. <u>Trauma Medical Director (Chairman; must be present > 50%)</u>
- 2. The clinical managers (or designees) of the departments involved with trauma care should play an active role with the committee.
- 3. The trauma center may wish to accomplish performance improvement activities in this committee or develop a separate peer review committee. This committee should handle peer review independent from department based review. The committee must meet regularly and maintain attendance and minutes. This committee must report findings to the overall hospital performance improvement program.

#### Rule 4.3.1. Emergency Department

- 1. The facility must have an emergency department, division, service or section staffed so those trauma patients are assured immediate and appropriate initial care. The emergency physician and/or mid level providers must be in-house 24 hours/day, immediately available at all times, and capable of evaluating trauma patients and providing initial resuscitation. The emergency medicine physician will provide team leadership and care for the trauma patient until the arrival of the surgeon in the resuscitation area. The emergency department must have established standards and procedures to ensure immediate and appropriate care for the adult and pediatric trauma patient. The medical director for the department, or his designee, must participate with the Multidisciplinary Trauma Committee and the trauma PI process.
- 2. The director of the emergency department, along with the TMD, may establish trauma-specific credentials that should exceed those that are required for general hospital privileges (i.e., ATLS verification).
- 3. There should be an adequate number of RN's staffed for the trauma resuscitation area in-house 24 hours/day. Emergency nurses staffing the trauma resuscitation area must be a current provider of TNCC and participate in the ongoing PI process of the trauma program. There must be a written plan ensuring

nurses maintain ongoing trauma specific education. Nurses must obtain TNCC within 18 months of assignment to the ER.

4. The list of required equipment necessary for the ED can be found at the end of this Chapter on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

Source: Miss. Code Ann. § 41-59-5

### Rule 4.3.2. Surgical Suites/Anesthesia

- 1. The surgical team must be on-call with a well-defined mechanism for notification to expedite transfer to the operating room if the patient's condition warrants. The process should be monitored by trauma PI program.
- 2. The OR nurses should participate in the care of the trauma patient and be competent in the surgical stabilization of the major trauma patient.
- 3. The surgical nurses are integral members of the trauma team and must participate in the ongoing PI process of the trauma program and must be represented on the Multidisciplinary Trauma Committee.
- 4. The OR supervisor must be able to demonstrate a prioritization scheme to assure the availability of an operating room for the emergent trauma patient during a busy operative schedule.
- 5. Anesthesia must be promptly available with a mechanism established to ensure notification of the on-call anesthesiologist. The Level III trauma center must document conditions when the anesthesiologist must be immediately available for airway emergencies and operative management of the trauma patient.
- 6. Anesthesiologists on the trauma team must have successfully completed an anesthesia residency program approved by the Accreditation Council for Graduate Medical Education, the American Board of Osteopathic Specialties, or the American Osteopathic Board and should have board certification in anesthesia.
- Anesthesia requirements may be fulfilled by Certified Registered Nurse Anesthetists (CRNAs) and/or anesthesia residents who are capable of assessing emergent situations in trauma patients and of providing an indicated treatment, including initiation of surgical anesthesia. When the CRNA is used to meet this requirement, the staff Anesthesiologist will be advised and promptly available at all times and present for operations. Trauma centers must document conditions when the anesthesiologist must be immediately available for airway emergencies and operative management of the trauma patient. The availability of the anesthesiologist and the absence of delays in operative anesthesia must be documented and monitored by the PI process. The anesthesiologist participating on the trauma team should have the necessary educational background in the care

of the trauma patient; participate in the Multidisciplinary Trauma Committee and the trauma PI process.

8. The list of required equipment necessary for Surgery and Anesthesiology the ED can be found at the end of this Chapter on line at <a href="http://msdh.ms.gov/msdhsite/\_static/49.html">http://msdh.ms.gov/msdhsite/\_static/49.html</a>.

Source: Miss. Code Ann. § 41-59-5

#### Rule 4.3.3. Post Anesthesia Care Unit (PACU)

- 1. A Level III trauma center must have a PACU available 24 hours/day to the postoperative trauma patient. Hospital policy must be written to assure early notification and prompt response. Frequently, it is advantageous to bypass the PACU and directly admit to the ICU. In this instance, the ICU may meet these requirements.
- 2. PACU nurses must show evidence of completion of a structured in-service program. There must be a written plan ensuring nurses maintain ongoing critical care education. PACU staffing should be in sufficient numbers to meet the critical need of the trauma patient.
- 3. The list of required equipment necessary for the PACU can be found at the end of this Chapter on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

Source: Miss. Code Ann. § 41-59-5

#### Rule 4.3.4. Intensive Care Unit (ICU)

- 1. The ICU must have a surgical director or surgical co-director who is responsible to set policy and administration and establish standards of care to meet the unique needs of the trauma patient. He/she is responsible for the quality of care and administration of the ICU. The trauma medical director must work to assure trauma patients admitted to the ICU will be admitted under the care of a general surgeon or appropriate surgical subspecialists. In addition to overall responsibility for patient care by the primary surgeon, it is desirable to have inhouse physician coverage for the ICU at all times. This may be provided by a hospitalist or emergency physician.
- 2. Level III Trauma Center should provide staffing in sufficient numbers to meet the needs of the trauma patient. There must be a written plan ensuring nurses maintain ongoing critical care education. ICU nurses are an integral part of the trauma team and as such, should be represented on the Multidisciplinary Trauma Committee and participate in the PI process of the trauma program.

- 3. ICU nurses must show evidence of completion of a structured in-service program. There must be a written plan ensuring nurses maintain ongoing trauma specific education.
- 4. The list of required equipment necessary for the ICU can be found at the end of this Chapter on line at http://msdh.ms.gov/msdhsite/\_static/49.html.

Rule 4.4.10 Essential and Desirable Chart for Level III Trauma Centers (Reserved) Education:

Level III Trauma Centers must have internal trauma education programs for physicians, mid-level providers, nurses, and pre-hospital providers (when employed by the hospital).

Source: Miss. Code Ann. § 41-59-5

# Rule 5.1.7. Multidisciplinary Trauma Committee

- 1. The purpose of the committee is to provide oversight and leadership to the entire trauma program. The exact format will be hospital specific and may be accomplished by collaboration with another designated trauma center in the system. The major focus will be on PI activities, policy development, communication among all team members, development of standards of care, education and outreach programs, and injury prevention. The committee oversees the implementation of the process which includes all program related services, meets regularly, takes attendance, maintains minutes and works to correct overall program deficiencies to optimize patient care. Membership for the committee includes representatives (if available in the community) from:
  - a. Emergency Medicine
  - b. Respiratory Therapy
  - c. Radiology
  - d. Laboratory
  - e. Rehabilitation
  - f. Pre-hospital Care Providers
  - g. Administration
  - h. Nursing
  - i. Trauma Program Manager
  - j. Trauma Medical Director (Chairman, must be present > 50%)

- 2. The clinical managers (or designees) of the departments involved with trauma care should play an active role with the committee.
- 3. The trauma center may wish to accomplish performance improvement activities in this committee or develop a separate peer review committee. This committee should handle peer review independent from department based review. The committee must meet regularly and maintain attendance and minutes. This committee must report findings to the overall hospital performance improvement program.

## Rule 5.3.1. Emergency Department

- 1. The facility must have an emergency department staffed so trauma patients are assured immediate and appropriate initial care. There must be a designated physician director. It is not anticipated that a physician will be available on-call to an emergency department in a Level IV Trauma Center; however it is a desirable characteristic of a Level IV. The on-call practitioner must respond to the emergency department based on local written criteria. A system must be developed to assure early notification of the on-call practitioner. Compliance with this criterion must be documented and monitored by the Trauma Performance Improvement process.
- 2. All physicians and mid-level providers (Physician Assistant/Nurse Practitioner) on the trauma team responsible for directing the initial resuscitation of the trauma patients must be currently certified in The American College of Surgeons Advanced Trauma Life Support (ATLS). ATLS requirements are waived for Board Certified Emergency Medicine and Board Certified General Surgery Physicians. Rural Trauma Course (RTC) may be substituted for ATLS at Level IV Trauma Centers.
- 3. Emergency nurses staffing the trauma resuscitation area must be a current provider in TNCC. Nurses must obtain TNCC within 18 months of assignment to the ER. Adequate numbers of nurses must be available in-house 24 hours/day, to meet the need of the trauma patient. The nurse may perform other patient care activities within the hospital when not needed in the emergency department.
- 4. Compliance with the above will be evidenced by:
  - a. Published on-call list of practitioners to the Emergency Department;
  - b. Written trauma specific education plan for nurses;
  - c. Documentation of nursing staffing patterns to assure 24-hour coverage.

d. The list of required equipment necessary for the ED can be found at the end of this Chapter on line at http://msdh.ms.gov/msdhsite/static/49.html.

Source: Miss. Code Ann. § 41-59-5

Rule 5.4.6 <u>Essential and Desirable Chart for Level IV Trauma Centers (Reserved) Education:</u>
<u>Level IV Trauma Centers must have internal trauma education programs for physicians, mid-level providers, nurses, and pre-hospital providers (when employed by the hospital).</u>

Source: Miss. Code Ann. § 41-59-5

## Rule 6.2.9. Required Clinical Components

- 1. Secondary pediatric trauma centers must have published on-call schedules and have the following medical specialists immediately available 24 hours/day to the injured pediatric patient:
- 2. Pediatric Emergency Medicine (in-house 24 hours/day). Emergency Physician and/or mid-level provider (Physician Assistant/Nurse Practitioner) must be in the specified trauma resuscitation area upon patient arrival.
- 3. Trauma/General or Pediatric Surgery. It is desirable that a back up surgeon schedule is published. It is desirable that the surgeon on-call is dedicated to the pediatric trauma center and not on-call to any other hospital while on pediatric trauma call. A system should be developed to assure notification of the on-call surgeon and compliance with these criteria and their appropriateness must be documented and monitored by the PI process. Response time for Alpha Alert/Activations is 30 minutes and starts at patient arrival or EMS notification, whichever is shorter. Response time for Bravo Alerts/Activations is 60 45 minutes from patient arrival.
- 4. Orthopedic Surgery. It is desirable that a back up surgeon schedule is published. It is desirable that the surgeon on-call is dedicated to the pediatric trauma center and not on-call to any other hospital while on pediatric trauma call. A system should be developed to assure notification of the on-call surgeon and compliance with these criteria and their appropriateness must be documented and monitored by the PI process. Response time for all trauma activations is 60 minutes from the time notified to respond.
- 5. Anesthesia. Anesthesia must be immediately available with a mechanism established to ensure early notification of the on-call anesthesiologist. Anesthesia must be available 24 hours/day. Anesthesia chief residents or certified nurse anesthetist (CRNA) may fill this requirement. When residents or CRNAs are utilized, the staff anesthesiologist on-call will be advised, promptly available, and present for all operations. Hospital policy must be established to determine when

the anesthesiologist must be immediately available for airway control and assisting with resuscitation. The availability of the anesthesiologist and the absence of delays in airway control or operative anesthesia must be documented and monitored by the PI process. The maximum response time for all trauma patients is 30 minutes from the time notified to respond.

- 6. The following specialists must be on-call and promptly available:
  - a. Pediatrics
  - b. Radiology
- 7. It is desirable (although not required) to have the following specialists available to the secondary pediatric trauma center:
  - a. Hand Surgery
  - b. Obstetrics/Gynecology Surgery
  - c. Ophthalmic Surgery
  - d. Oral/Maxillofacial Surgery
  - e. Plastic Surgery
  - f. Critical Care Medicine
  - g. Thoracic Surgery\*

- 8. The staff specialist on-call will be notified at the discretion of the trauma surgeon and will be promptly available. The PI program will continuously monitor this availability.
- 9. Policies and procedures should exist to notify the patient's primary physician of the patient's condition at an appropriate time.

Source: Miss. Code Ann. § 41-59-5

<sup>\*</sup> The trauma surgeon is presumed to be qualified and have privileges to provide emergency thoracic surgical care to pediatric patients with thoracic injuries. If this is not the case, the facility should have a board-certified thoracic surgeon immediately available for the injured pediatric patient (within 30 minutes of the time notified to respond).